

Att'y Dkt. No. 0317-0001U.S. App. No: 09/923,319**REMARKS**

Favorable reconsideration, reexamination, and allowance of the present patent application are respectfully requested in view of the foregoing amendments and the following remarks.

Allowable Subject Matter

Applicant gratefully acknowledges the indication at pages 1 and 7 of the Office Action that Claims 9-11 are free of the prior art. In order to expedite prosecution of the application, Applicants have incorporated the subject matter from Claim 9 into Claim 1. Applicants have also amended independent method Claim 12 to relate to, *inter alia*, methods involving a circular arrangement of field coils. Claims 6-9 and 14 have been canceled, and will be further pursued in a continuation application. Claim 13 has been amended to depend from allowable Claim 12. An early indication of the allowability of all of the pending Claims is therefore respectfully solicited.

Objection to the Abstract

In the Office Action, at page 2, the Abstract of the Disclosure was objected to. Applicant respectfully requests reconsideration of this objection.

By way of the foregoing amendments, Applicant has amended the Abstract to address the concerns in the Office Action. Applicant respectfully submits that the Abstract is not objectionable, and therefore respectfully requests withdrawal of the objection thereto.

Rejection under 35 U.S.C. § 103

In the Office Action, beginning at page 3, Claims 1-8 and 12-16 were rejected under 35 U.S.C. § 103(a) as reciting subject matters which are allegedly obvious, and therefore allegedly unpatentable, over the hypothetical combination of several U.S. patents. Applicant respectfully requests reconsideration of these rejections.

Att'y Dkt. No. 0317-0001U.S. App. No: 09/923,319

By way of the foregoing amendments, as discussed above, Claim 9 has been placed in independent form by incorporation of its subject matter into independent Claim 1. Applicants have also amended independent method Claim 12 to relate to, *inter alia*, methods involving a circular arrangement of field coils. Claim 13 *et seq.* have been amended to depend from Claim 12. Accordingly, Applicants respectfully submit that the various rejections of the claim are now moot.

For at least the foregoing reasons, Applicant respectfully submits that Claims 1-5, 10-13, 15, and 16, each taken as a whole, patentably define over the prior art. Applicant therefore respectfully requests withdrawal of the rejections of Claims 1-5, 12, 13, 15, and 16 under 35 U.S.C. § 103(a).

Conclusion

For at least the foregoing reasons, Applicant respectfully submits that the present patent application is in condition for allowance. An early indication of the allowability of the present patent application is therefore respectfully solicited.

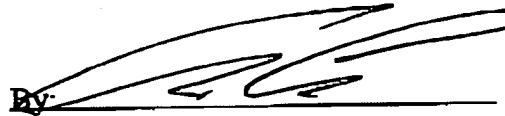
If Mr. Jones believes that a telephone conference with the undersigned would expedite passage of the present patent application to issue, he is invited to call on the number below.

Att'y Dkt. No. 0317-0001U.S. App. No: 09/923,319

It is not believed that extensions of time are required, beyond those that may otherwise be provided for in accompanying documents. However, if additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required therefor are hereby authorized to be charged to Deposit Account No. 50-0622.

Respectfully submitted,

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Marked-up Copies of
Amended Claims

U.S. Dkt. No. 0317-0001
U.S. App. No: 09/923.319

1. (Amended) An apparatus for generating electrical energy comprising[.];
an elongated conduit having a central bore adapted to receive a magnetic element
for passage therethrough [.];
a plurality of wire coils wound about said conduit and spaced along the length
thereof [.];
a magnetic element sized to pass through said bore [.]; and
means to propel said magnetic element through said bore [.];
wherein said conduit is curved so as to describe a circle having sufficient diameter
to permit said magnetic element to freely traverse said bore, said conduit having a gas
inlet and a gas outlet and said magnetic element being confined therein;
whereby passage of said magnetic element through said bore induces an electrical
current in said coils.

Claims 6-9 have been deleted.

10. (Amended) The apparatus of claim [9] 1, further comprising means to inject a
propellant gas into said conduit through said gas inlet, said propellant gas being
pressurized whereby said magnetic element is propelled within said conduit.
11. (Amended) The apparatus of claim [9] 1, further comprising:
a combustion chamber connected to said conduit through said gas inlet [.];
a supply of combustible propellant [.];
means to charge a quantity of said propellant into said combustion chamber; and
means to ignite said propellant [.];
whereby combustion gas is directed through said gas inlet into said conduit
whereby said magnetic element is propelled within said conduit.
12. A method of generating electricity from high pressure combustion gases
comprising [.];
providing a plurality of field coils in substantially [linear] circular arrangement on
a barrel having a central bore therethrough [.];
providing a magnetic armature sized to pass through said bore [.];
providing a means to propel said armature through said bore comprising a ballistic

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City Dkt. No. 0317-0001
U.S. App. No: 09/923.319

propellant capable of generating high pressure combustion gases directed against said armature in a direction corresponding to said [linear] circular arrangement of said field coils [,] ; and

propelling said magnetic armature through said bore whereby the magnetic field of said armature passing across said field coils induces electrical current in said coils.

13. (Amended) A method [of generating electricity comprising] in accordance with Claim 12, wherein propelling a magnetic armature comprises propelling a magnetic pellet [through at least one stationary tubular field coil].

Claim 14 has been canceled.

15. (Amended) The method of claim [14] 12, wherein said combustion gases are [is] obtained from a charge of explosive propellant.

16. (Amended) The method of claim 15 wherein said propellant [is] comprises an ignitable powder, liquid, or gas.

Marked-up Copy of
Amended Abstract

Exhibit Dkt. No. 0317-0001
U.S. App. No: 09/923,319

ABSTRACT OF THE DISCLOSURE

The present invention provides a method and apparatus for generating electrical energy. In particular, the invention provides [a means] devices and methods by which the explosive energy provided by highly combustible propulsive sources, such as solid, liquid and gaseous propellants, can be used to generate sufficient electrical energy to power devices such as high energy spark generators, portable cardiac defibrillators, lasers and the like. The apparatus used can be compact, highly portable, and reusable. By providing a storage [means] device and electrical discharge control, the method and apparatus can be adapted to power low energy devices over an extended period of time.